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### REMARKS

Claims 1-4, 6, 8, 12, and 21-39 are pending in the present application. By this Response, Claims 1, 4, 6, 8, 12, 21, 37-39 are amended. The amendments to the claims are supported by the application as originally filed, and do not introduce new matter. It is respectfully submitted that the present application is in condition for allowance.

#### REJECTION OF CLAIMS 1-4, 6, 8, 12, AND 21-39 UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

Claims 1-4, 6, 8, 12, and 21-39 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. Applicants have amended the claims and respectfully submit that this rejection is moot. Applicants request that the Examiner withdraw this rejection.

#### REJECTION OF CLAIMS 1-4, 6, 8, 12, AND 21-39 UNDER 35 U.S.C. § 112, 2ND PARAGRAPH

Claims 1-4, 6, 8, 12, and 21-39 were rejected under 35 U.S.C. § 112, first paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner stated that "Claims 1, 38 and 39 are confusing as they recite "oxygen is dispersed throughout the polymer network"... "matrix is formed prior to gas production" and "oxygen is formed in the matrix during manufacture of the matrix". As currently amended, the claims no longer recite these phrases.

Claims 30 and 36 were rejected for the phrase "resorbable polymers" which "does not set out the meters and bounds of the claim". Applicants traverse this rejection. In the published application of the present application, paragraph 120 recites the following.

"Additionally, wound dressing devices or contact tissue material devices of the present invention may be made of resorbable materials, such as polylysine or natural polymers. These devices may be left in place and are then resorbed by the body, instead of being removed."

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Resorption by the body are known processes and polymers that are resorbed by the body are known to those skilled in the art. Applicants request that the Examiner withdraw this rejection.

REJECTION OF CLAIMS 1-4, 6, 8, 12, AND 21-39 UNDER 35 U.S.C. § 103(a)

Claims 1-4, 6, 8, 12, and 21-39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. US 2002/0042587 (herein "the Murdock application") and U.S. Patent No. 5,792,090 (herein "the '090 patent"). Applicants respectfully traverse this rejection in view of the present amendments.

The Examiner stated that "it would be obvious to one having ordinary skill in the art at the time of the invention to provide foam polymeric cross-linked closed cell foam that can be produced chemically as disclosed by US '587, and produce foam by oxygen gas delivered by the reaction of hydrogen peroxide and catalyst and replace the polymer by polyacrylamide as disclosed by US '090, motivated by the teaching of US '090 ... with reasonable expectation of having polyacrylamide cross-linked closed cell foam entrapping oxygen produce chemically by the reaction of hydrogen peroxide and catalyst with minimal infection to the underlying skin."

Applicants' submit the attached Declaration to show that the Murdock application cannot provide a teaching, alone or in combination with the '090 patent, that renders Applicants' currently claimed invention obvious. The Declaration shows that articles made using the methods taught by the Murdock application in Examples 1 and 2 results in a polymer-based article that does not provide oxygen as does an embodiment of the present invention (the AcryMed matrix) does. Applicants are submitting an unsigned Declaration as of this date, but will provide the executed version promptly.

As shown in Expenment 1 of the Declaration (No. 6 Expenmental Data), the Murdock articles did not deliver as much oxygen as the AcryMed matrix. The Murdock articles, made as described as Batch 1 and Batch 2, delivered oxygen at the level of only 35 mmHg and 15 mmHg, respectively, compared to the AcryMed matrix oxygen delivery at 196 mmHg. (See Table 1, the difference between the starting values at Time 0 and the

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values at 30 minutes) The Figures 1-3 shows flat lines for the delivery of oxygen by the Murdock articles (Figures 1 and 2), and an essentially static release of oxygen. In contrast, the AcryMed matrix delivers an increasing amount of oxygen over time (See Figure 3).

Experiment 2 shows that when the same sized materials are compared, the amount of oxygen and the delivery of oxygen by the AcryMed matrix is different from that of the Murdock article. In a measure of absolute oxygen content, (See Table 2) the Murdock articles contained oxygen, that was released in a 24 hour period, of an average of 19.52 mmHg for Batch 1 and 4.6 mmHg for Batch 2. The AcryMed matrix contained an average of 244.15 mmHg of deliverable oxygen. The difference in amount of oxygen released for the AcryMed matrix is 12.5 times that of the Murdock article (Batch 1) and 53.1 times that of the Murdock article (Batch 2). The oxygen % of material, wt/wt, is very different for the AcryMed matrix compared to any of the Murdock articles, 0.23% and 0.37% for the AcryMed matrices compared to less than 0.0005% for the Murdock article (See Table 2, last column).

The look and feel of the two materials are also different. The two batches of Murdock articles, which have different freeze/thaw steps, had similar appearances. As shown in Figure 4 A, the Murdock article appears as a gelatinous slab of polymer material with very small closed-cells within the polymer material. In contrast, the AcryMed matrix has many, regularly sized closed-cells and the majority of the volume of the material is closed cells, not polymer material. These differences are also indicated in Table 2, where a 60 mm diameter sample of both batches of the Murdock article has a weight between 5.4-6.4 grams, whereas a 60 mm diameter sample of the AcryMed matrix has a weight of 0.22-0.37grams.

After 24 hours of soaking in water, the changes to the Murdock article and the AcryMed matrix were noticeable. The Murdock article became transparent and the structural integrity of the material was sharply decreased. The AcryMed matrix maintained its general appearance with a decrease in size of the closed-cells, and thus resulting overall size, but maintained its structural integrity.

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Applicants submit that there are many differences between the article as taught by Murdock and the article as currently claimed by Applicants. Thus, Murdock cannot provide a teaching that results in a material that renders Applicants' currently claimed invention obvious. The addition of the teachings of the '090 patent does not cure the deficiencies of the Murdock application's teaching. In fact, a direct substitution of polyacrylamide for the methods taught in Example 1 and 2 of Murdock would lead to an article that is not polymerized because oxygen inhibits the polymerization of acrylamide. For at least these reasons, Applicants submit that neither alone nor in combination do the cited references render the currently claimed invention obvious.

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**CONCLUSION**

The foregoing is a complete response to the Office Action mailed September 14, 2006. Applicants believe that the Office Action has been fully responded to, and that each of the claims is in condition for immediate allowance. Applicants respectfully request reconsideration and allowance of all pending claims.

A Petition for a two month extension of time is enclosed and the Commissioner is hereby authorized to charge the fee for a two month extension of time of \$225, and any other fees that may be required, or credit any overpayment, to Deposit Account No. 20-1507.

If the Examiner believes there are other issues that can be resolved by a telephone interview, or there are any informalities that remain in the application which may be corrected by the Examiner's amendment, a telephone call to the undersigned attorney at (404) 885-3652 is respectfully solicited.

Respectfully submitted,



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